

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 132008***132008***

Page 2

Item ID: 647.1305

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Start Qty: 1.00

1

Cust Item ID:

Required Date: 5/01/15

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

130

Packaging

Packaging

0.00

0.00

Memo

Identify and pack for shipping as per PPP 647.1305

Location: EG01

EXPIRY DATE OF:

RTV Loctite 598: _____

MAGNOBOND 6398 PART 1: _____

MAGNOBOND 6398 PART 2: _____

SEALANT PR-1425: _____

***INDICATE ON BOX EXPIRY DATE OF RTV, MAGNOBOND PART1,
MAGNOBOND PART2 AND SEALANT PR-1425 ***

(1x)

DAS

46

9-89

APR 29 2015

140

140

QC

QC21 - Final Inspection - Work Order Release

0.00

0.00

Memo

*** Enter exp. date in lot maintenance for RTV loctite 598, MAGNOBOND
PART1, MAGNOBOND PART2 AND SEALANT PR-1425***

MLJ

APR 30 2015

MS-4-30

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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Wednesday, April 22, 2015 11:14:18 AM

Page 1

Work Order ID: 132008

132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 13.07.16 JLM VERIFIED BY:DD IPP
REV:B 14.07.31 AS PER ECN C2 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.0112		Manufactured	No				Each	239.0000		8			
647-0112									**				
Strut Bracket											DAS 6 9-89		
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				DAS 02 9-89
				CCK109			239						
				112215			42						
				122245			19						
				122871			52						
				123318			34						
				M130388			92						
647.1402		Manufactured	No				Each	2.0000		1			
647-1402									**				
Lower Cutter Assembly											DAS 6 9-89		
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				DAS 02 9-89
				CCK048			2						
				123319			2						
647.2011		Manufactured	No				Each	29.0000		2			
647-2011									**				
Lower Strut											DAS 6 9-89		
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				DAS 02 9-89
				Cck021			29						
				123511			8						
				125082			13						
				91803			4						
				92560			4						

APR 28 2015

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Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

AN3-11A

Purchased

No

Each

476.0000

12

AN3-11A
Bolt

DAS
46
9-89

**

DAS
6
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST338a

476

m016457

2

m125709

470

m130388

4

2
5
5

AN3C10A

Purchased

No

Each

31.0000

2

AN3C10A
Bolt

DAS
46
9-89

**

DAS
6
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST349

31

m128634

25

m129521

6

2
4

MS27039-08-10

Purchased

No

Each

957.0000

4

MS27039-08-10
Screw

DAS
46
9-89

**

DAS
6
9-89

APR 28 2015
DAS
02
9-89

Location

Loc Qty

Loc Code

ST281

957

m128799

957

4

DQA: _____ Date: _____



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Page 3

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132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

Each

3,876.000

70

NAS1149F0332P

DAS

**

Washer

46

9-39

Location

Loc Qty

Loc Code

GA

222

122063

222

ST260a

2586

m128401

6

m131026

80

m131697

2500

st268

1068

123900

460

m130325

522

m130388

86

DAS

6

9-89

DAS

02

9-89

NAS1149FN832P

Purchased

No

Each

3,546.000

8

NAS1149FN832P

DAS

**

Washer

46

9-39

Location

Loc Qty

Loc Code

ST260a

1870

125268

1870

st268

1676

125268

755

M130388

921

DAS

6

9-89

DAS

02

9-89

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Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

MS21042-3 MS21042L3 Purchased No

Each 573.0000

MS21042-3
Nut / use MS21042L3

DAS
46
9-89

**

DAS
6
9-89
DAS
02
9-89

Location Loc Qty Loc Code

CA 501

M129682 501

ST305 72

M128770 12

M129541 26

M130388 34

Each 33.0000

MS21042-08 MS21042L08 Purchased No

MS21042-08
USE MS21042L08

DAS
46
9-89

**

DAS
6
9-89

Location Loc Qty Loc Code

ST304 25

122815 25

ST306 8

123185 1

M130388 7

APR 22 2015
DAS
02
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Wednesday, April 22, 2015 11:14:18 AM

Page 5

Work Order ID: 132008

132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

Each

1,269.000

MS21042L4

DAS

46

9-89

Locknut

**

4

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

FP001

42

m124231

42

GA

574

m127819

574

ST260a

110

m130799

56

m131803

54

ST305

543

426

426

m128300

8

m130922

97

m131618

12

4

601.2045

Purchased

No

Each

21.0000

601 2045

DAS

46

9-89

RTV (LOCTITE 598)

**

0

6
9-89

APR 23 2015

DAS

02

9-89

Location

Loc Qty

Loc Code

CCK096

4

m131142

4

cck15a

17

m131311

17

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																	
OTHER : ☐																									

Picklist Print

Wednesday, April 22, 2015 11:14:19 AM

Page 6

Work Order ID: 132008

132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

647.2010

DAS

Manufactured No

Each

69.0000

2

647 2010

46

Upper Strut

9-89

**

Location

Loc Qty

Loc Code

CCK094

69

106783

32

91802

1

91895

30

92516

2

m123185

4

DAS

6

9-89

DAS

02

9-89

AN3-15A

DAS

Purchased

No

Each

23.0000

5

AN3-15A

46

Bolt

9-89

**

Location

Loc Qty

Loc Code

FG

10

114941

10

ST348

13

M128429

13

DAS

6

9-89

DAS

02

9-89

DAS

6

9-89

647.1403

Manufactured

No

Each

8.0000

1

647 1403

DAS

46

Upper Cutter Assembly, U-Channel

9-89

**

Location

Loc Qty

Loc Code

cck047

8

123306

4

128326

4

DAS

02

DAS 9-89

6

9-89

91292A080

Purchased

No

Each

42.0000

2

91292A080

DAS

46

Screw

9-89

**

Location

Loc Qty

Loc Code

ST564

42

M127948

42

APR 23 2015

DAS

6

9-89

DAS

02

9-89

Wednesday, April 22, 2015 11:14:19 AM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Wednesday, April 22, 2015 11:14:19 AM

Page 7

Work Order ID: 132008

132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

93625A300

Purchased

No

Each

44.0000

93625A300

DAS
46

Locknut

9-89

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST564

44

M127948

44

Each

84.0000

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST564

84

M127948

84

Each

10.0000

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST556

10

M126230

1

M128007

9

Each

80.0000

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST556

80

M126230

20

M128007

60

LN9037-08018

Purchased

No

LN9037-08018

Screw

DAS
46

9-89

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST556

10

M126230

1

M128007

9

Each

80.0000

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST556

80

M126230

20

M128007

60

LN9025-0820K

Purchased

No

LN9025-0820K

Lock Tab Washer

DAS
46

9-89

**

DAS

6

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST556

80

M126230

20

M128007

60

APR 23 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Wednesday, April 22, 2015 11:14:19 AM

Page 8

Work Order ID: 132008

132008

Parent Item: 647.1305

647 1305

Parent Item Name: EC145 Cable Cutter System Removable Provisions U Channel Compatible

Start Date: 4/22/15

Required Date: 5/01/15

Start Qty: 1.00

Required Qty: 1.00

647.2113

Manufactured No

Each

4.0000

647 2113

DAS

46

Lower Rail, U-Channel

9-89

**

DAS

02

9-89

Location

Loc Qty

Loc Code

CCK108

4

001624

1

123496

3

Each

7.0000

**

647.1702

Manufactured No

647 1702

DAS

46

Skid Deflector Assembly

9-89

Location

Loc Qty

Loc Code

ST043

7

130097

7

APR 23 2015

DAS

6

9-89

DAS

02

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 04592

SHEET 1 OF 1

DWG NO. 647.1300

REV: C

PREPARED BY: J. BECKER

DATE: 06/19/14

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: EC145 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF:

CURRENT STOCK

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED BOM.

ACTION LIST:

1. ADD F/N 11 TO ALL CURRENT KITS IN STOCK

2. UPDATE III145-2 & ICA145-2

11	R	647.0112	8	8			STRUT BRACKET			
F/N	TC	PART NUMBER	.1306	.1305	.1304	.1303	DESCRIPTION		MATERIAL	SPECIFICATION
			QTY							
DOCUMENTS EFFECTED:							CHANGE CATEGORY		DER REVIEW REQUIRED	
☐ MDL ☒ INSTALL INSTRUC ☒ ICA ☒ BOM							☐ MAJOR ☒ MINOR		☐ YES ☒ NO	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES: UNLESS OTHERWISE SPECIFIED

1 AFTER INSTALLATION, APPLY F/N 73 A/R TO FILL GAPS AND FILLET EDGES

2. APPLY F/N 74 TO FAYING SURFACES

3 AT CUSTOMERS OPTION, INSTALL F/N 77 BY MATCH DRILLING ONTO F/N 1

4 INSTALL FOR 647.1301, 647.1302.

5 INSTALL FOR 647.1304, 647.1305.

6 APPLICABLE WHEN EUROCOPTER P/N 145-250014.11 IS INSTALLED WITH EUROCOPTER CABLE CUTTER FIXED PROVISIONS.

7 APPLICABLE WHEN REPLACING EUROCOPTER P/N 145-250074.11

UNINCORPORATED ECN(s)

04485, 04592

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION, PR3		N/C
N/C	INITIAL RELEASE	06/05/09	P. BRAVO
A	INCORPORATED ECH 02943, 03020, 03040	01/25/11	P. BRAVO
B	INCORPORATED ECH 02919	07/05/13	P. BRAVO
C	INCORPORATED ECH 04059	08/13/13	P. BRAVO

13		13	13		13	26	647.1812	SHIM		
4		4	4		4	25	647.1910	CLIP		
1		1	1		1	24	647.1810	NOSE DOOR DOUBLER		
1		1	1		1	23	647.1818	NOSE DOOR SPACER		
2		2	2		2	22	647.1813	ANGLE		
1		1	1		1	21	647.1913	TEE		
1		1	1		1	20	647.1814	GUSSET, LH		
1		1	1		1	19	647.1815	GUSSET, RH		
1		1	1		1	18	647.1915	SUPPORT ANGLE		
	2	2		2	2	17	647.2011	LOWER STRUT		
1		1	1		1	16	647.1914	BRACKET		
1		1	1		1	15	647.1816	SUPPORT, LH		
1		1	1		1	14	647.1817	SUPPORT, RH		
1		1	1		1	13	647.1912	BRACKET, LH		
1		1	1		1	12	647.1911	BRACKET, RH		
4		4	4	4	8	11	647.0112	STRUT BRACKET		
				1	1	10	647.2110	LOWER RAIL		
			1		1	9	647.2111	UPPER RAIL		
1		1	1		1	8	647.1610	WIPER DEFLECTOR, FWD		
1		1	1		1	7	647.1601	WIPER DEFLECTOR ASSY, AFT		
				2	2	6	647.1701	SKID DEFLECTOR ASSY		
1		1	1		1	5	647.3201	GROUNDING CABLE ASSY		
1		1	1		1	4	647.2201	CROSS ASSY		
1		1	1		1	3	647.1602	DOUBLER ASSY		
	1	1		1	1	2	647.1402	CUTTER ASSY (LOWER)		
				1	1	1	647.1401	CUTTER ASSY (UPPER)		
							647.1306	FIXED PROVISIONS KIT U CHANNEL		
							647.1305	REMOVABLE PROVISIONS KIT U CHANNEL		
							647.1304	EC145 CABLE CUTTERS KIT U CHANNEL COMPATIBLE		
							647.1303	FIXED PROVISIONS KIT		
							647.1302	REMOVABLE PROVISIONS KIT		
							647.1301	EC145 CABLE CUTTERS KIT		
.1306	.1305	.1304	.1303	.1302	.1301	FIND #	PART #	DESCRIPTION	MATL	SPEC.

BOM Table (Restructured)

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE (MO/DA/YR) 07/04/09	APICAL INDUSTRIES
		DRAWN BY: CHICREP	2608 TEMPLE HEIGHTS DR.
		R. HOSANO	OCEANSIDE, CA. 92056-3512 (760)724-5300
		DRAWING APPROVAL P. BRAVO	EC145 CABLE CUTTERS KIT
		06/05/09	
		CONTRACT NO.	
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.001 ANGLES ±.5°	
SIZE	CAGE CODE	DWG. NO.	REV
B	07M26	647.1300	C
SCALE NONE		SHEET 1 OF 9	

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	2	2			85	647.1702	SKID DEFLECTOR ASSY	△	
	1	1			84	647.2113	LOWER RAIL (U CHANNEL KIT)		
	8	8			83	601.3655	WASHER	LN9025-0820K	
	8	8			82	601.3654	SCREW	LN9037-8018	
1		1			81	647.2112	UPPER U CHANNEL		
	4	4			80	601.3653	WASHER	93475A270	
	2	2			79	601.3652	LOCKNUT	93625A300	
	2	2			78	601.3651	SCREW	91292A080	
	1	1			77	647.1403	CUTTER ASSY (UPPER U CHANNEL)		
	5	5			76	601.3650	BOLT	AN3-15A	
REF			REF	REF	75	647.5701	GPS MOUNT KIT	△	
2	2	2	2	2	74	601.1954	SCREW	MS27039-1-17	
2	2	2	2	2	73	647.2010	UPPER STRUT		
1	1		1	1	72	601.2045	RTV	LOCTITE 598	
1	1	1		1	71	600.1012	SEALANT	PR-1425 CLASS B	
1	1	1		1	70	600.0991	MAGNOBOND 6398 PART B		
1	1	1		1	69	600.0990	MAGNOBOND 6398 PART A		
4	4	4		4	68	601.3012	SCREW	MS27039-1-15	
2	2	2		2	67	601.3004	CAMLOC STUD		
2	2	2		2	66	601.3005	CAMLOC RETAINER		
2	2	2		2	65	601.3006	CAMLOC RECEPTACLE		
3 FT.	3 FT.	3 FT.		3 FT.	64	601.3011	P-SEAL		
1.1 FT.	1.1 FT.	1.1 FT.		1.1 FT.	63	601.3007	GROMMET	MS21266-2N	
2	2	2		2	62	601.3008	INSERT	NAS1834C-300	
11	11	11		11	61	601.2991	RIVET	CR3213-4-6	
2	2	2		2	60	601.1039	RIVET	CR3213-4-2	
8	8	8		8	59	601.1183	RIVET	CR3213-4-5	
.1306	.1305	.1304	.1303	.1302	.1301	FINO #	PART #	DESCRIPTION	MATL SPEC.

BOM Table(Restructured)

22		22	22		22	58	601.0790	RIVET	CR3213-4-3	
8		8	8		8	57	601.2995	RIVET	CR3213-6-6	
4		4	4		32	56	601.1915	RIVET	CR3213-4-4	
12		12	12		12	55	601.2207	NUTPLATE RIVET	CCR2645S-3-03	
4		4	4		4	54	601.1983	NUTPLATE RIVET	CCR2745S-3-03	
12		12	12		12	53	601.2980	NUTPLATE RIVET	CCR2645S-3-04	
12		12	12		12	52	600.0795	NUTPLATE	MS21047-3	
	4	4		4	4	51	601.3209	LOCKNUT	MS21042L4	
5	4	9	5	4	9	50	601.2973	LOCKNUT	MS21042-08	
29	17	46	29	16	45	49	601.2943	LOCKNUT	MS21042-3	
3		3	3		3	48	601.2375	WASHER		
10	8	18	10	8	18	47	601.2764	WASHER	NAS1149FN832P	
	70	32	70	32	102	46	601.1607	WASHER	NAS1149F0332P	
1		1	1		1	45	601.2525	SCREW	MS27039-0807	
4		4	4		4	44	601.1952	SCREW	MS27039-1-20	
	4	4		4	4	43	601.3010	SCREW	MS27039-0810	
4		4	4		4	42	601.3224	SCREW	AN525-10R12	
6		6	6		6	41	601.1365	SCREW	MS27039-1-10	
3		3	3		3	40	601.2198	SCREW	MS27039-1-07	
3		3	3		3	39	601.2999	SCREW		
18		18	18		18	38	601.2459	SCREW	MS27039C1-06	
4		4	4		4	37	601.1622	SCREW	MS27039-1-14	
10		10	10		10	36	601.2051	SCREW	MS24694C52	
2		2	2		2	35	601.2823	BOLT	AN3-4A	
1		1	1		1	34	601.1324	BOLT	AN4CH6A	
	2	2		2	2	33	601.1874	BOLT	AN3C10A	
	12	12		16	16	32	601.2826	BOLT	AN3-11A	
8		8	8		8	31	601.2638	WASHER	NAS1149F0432P	
4		4	4		4	30	601.3002	BOLT	NAS6604-66	
2		2	2		2	29	647.1811	SPACER		
4		4	4		4	28	647.2511	NUT		
4		4	4		4	27	647.2510	SLEEVE		
.1306	.1305	.1304	.1303	.1302	.1301	FINO #	PART #	DESCRIPTION	MATL	SPEC.

BOM Table(Restructured)

CHECKED DATE 02/01/04 DRAWN BY H. ROSARIO CHECKED BY J. BARBER DRAWING APPROVAL P. BRAVO 08/05/09 CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 EC145 CABLE CUTTERS KIT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ±.5°	SIZE CAGE CODE DWS. NO. B 07M26 647.1300 SCALE NONE SHEET 2 OF 9